

## **Abstract**

The invention refers to a method for breeding of a variety of Pacific abalone with orange shell. A new strain with uniform shell color of Pacific abalone is established by single mating or mass mating. The detailed procedures are as follows. The mature individuals with orange shell color are selected as breeders, and conditioned in the seawater. Macroalgae are fed and gentle aeration is provided daily. The gonad of breeders will eventually reach full ripeness; Artificial induction to spawn is conducted by combined desiccation, thermal shock and exposure to UV-irradiated seawater; The released gametes were fertilized by single mating or mass mating; A routine procedure is used for fertilized eggs incubation, larval and spat rearing. A new Pacific abalone strain of uniformly orange shell color is produced. In the invention, the new strain is produced by shell color mutant type abalone from natural populations or artificially cultivated stocks. No foreign genes are introduced. The methods are simple and feasible. The new strain has production traits superior to the common Pacific abalone. It is possible of the new abalone strain to bring about industrialization.

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